

Notice of Allowability

Application No.

10/736,229

Applicant(s)

MATSUYAMA, SHIGERU

Examiner

Kimnhung Nguyen

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/15/03, 7/11/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.


RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

DETAILED ACTION

1. This application has been examined. The claims 1-20 are allowed.

Reasons For Allowance

2. The following is an examiner's statement of reasons for allowance: The present invention is directed to a driver for driving a liquid crystal display comprising: an input terminal that inputs input data; an output terminal that outputs output data; a bi-directional common driver equipped with a first input/output terminal and a second input/output terminal, an input/output relationship of the first input/output terminal and the second input/output terminal being reversed in accordance with a shift direction controlled by a control signal. The combination of the closest prior art of Nakamura et al. (US 6,747,641), Nakajima et al. (US 6,791,539) and Udo et al. (US 6,304,241) show a similar invention, however, they fail to teach means for switching that is disposed between the input terminal and the first and second input/output terminals of the bi-directional common driver and that selectively inputs the input data from the input terminal to one of the first input/output terminal and the second input/output terminal; and means for switching that is disposed between the output terminal and the first and second input/output terminals of the bi-directional common driver and that selectively leads and outputs the output data to the output terminal, the output data being output from one of the first and the second input/output terminals and the input data being input to the other of the first and the second input/output terminals by the means for switching as claim 1; or providing an input switching unit that selectively inputs the input data from the input terminal to one of the first input/output terminal and the second input/output terminal; and providing an output selecting unit that

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selectively leads the output data to the output terminal, the output data being output from one of the first and the second input/output terminals and the input data being input to the other of the first and the second input/output terminals by the input switching unit as claim 3; or an input switching unit that is disposed between the input terminal and the first and the second input/output terminals of the bi-directional common driver and that selectively inputs the input data from the input terminal to one of the first input/output terminal and the second input/output terminal; and an output selecting unit that is disposed between the output terminal and the first and the second input/output terminals of the bi-directional common driver and that selectively leads and outputs the output data to the output terminal, the output data being output from one of the first and the second input/output terminals and the input data being input to the other of the first and the second input/output terminals by the input switching unit as claim 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimnhung Nguyen
August 30, 2006



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600